

511, 935

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
6 November 2003 (06.11.2003)

PCT

(10) International Publication Number
WO 03/092150 A1

- (51) International Patent Classification⁷: **H02P 3/22**
- (21) International Application Number: **PCT/US03/12445**
- (22) International Filing Date: **22 April 2003 (22.04.2003)**
- (25) Filing Language: **English**
- (26) Publication Language: **English**
- (30) Priority Data:
60/375,616 **24 April 2002 (24.04.2002)** **US**
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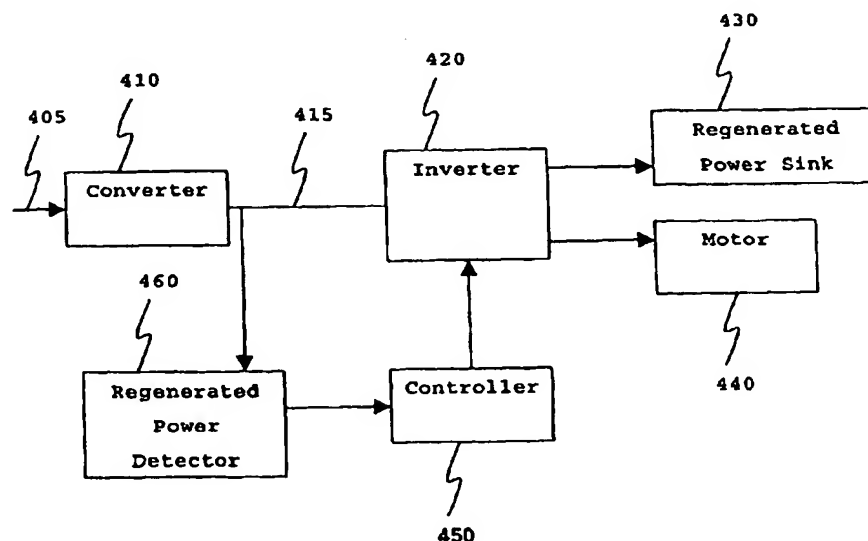
- (81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: **MESH CONNECTED BRAKE ARRAY FOR ELECTRICAL ROTATING MACHINES**



(57) **Abstract:** In the present invention, several polyphase devices are connected together: an inverter (420), and electrical rotating machine (440), and a resistive load or braking resistor (430). The purpose of the resistive load is to dissipate excess electrical power which may be produced when the inverter acts to slow down the rotating machine to act as a generator. In common art, this resistive load is a single DC resistor coupled to the DC link of the inverter via a separate resistor control transistor. In the present invention, the resistive load is a mesh connected array of resistors, and is electrically connected to the same inverter output terminals that the rotating machine is connected to. When it is desired that the resistors absorb energy, for example from a braking operation, then the harmonic content of the inverter output is adjusted, thus placing voltage differences across the resistor array (430) and causing current to flow in the resistors.



WO 03/092150 A1